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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.		
09/886,398	06/20/2001	Vinod Vasudevan	469802000120 4234			
7590 12/16/2004			EXAM	EXAMINER		
Gurminder Singh, Ph.D.			DIEP, NHON THANH			
Chief Executive NewsTakes, Inc	Officer & President	ART UNIT	PAPER NUMBER			
1633 Bayshore l	Highway, Suite 380	2613				
Burlingame, CA 94010			DATE MAILED: 12/16/2004			

Please find below and/or attached an Office communication concerning this application or proceeding.

		Applica	ition No.	Applicant(s)				
Office Action Summary			09/886,398 VASUDEVAN ET AL.		ΔΙ			
				Art Unit	AL.			
	·	Examin Nhon T		2613				
	The MAILING DATE of this commu				ldress			
Period fo								
THE - Exte after - If the - If NO - Failu Any	ORTENED STATUTORY PERIOD IN MAILING DATE OF THIS COMMUN INSIGHTS OF THIS COMMUN INSIGHTS OF THE MONTHS from the mailing date of this come of period for reply specified above is less than thirty (a) period for reply is specified above, the maximum is the return of the period for reply in the set or extended period for reply received by the Office later than three months and patent term adjustment. See 37 CFR 1.704(b).	IICATION. s of 37 CFR 1.136(a). In no munication. 30) days, a reply within the s itatutory period will apply and y will, by statute, cause the a	event, however, may a reply tatutory minimum of thirty (3 I will expire SIX (6) MONTHS application to become ABAN)	y be timely filed 10) days will be considered timel S from the mailing date of this or DONED (35 U.S.C. § 133).				
Status								
1)	Responsive to communication(s) fil	ed on						
		2b)⊠ This action is	non-final					
<i>'</i> —		<i>'</i> —		s prosecution as to the	e merits is			
-,	3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.							
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Disposit	ion of Claims							
-	4) Claim(s) 1-25 is/are pending in the application.							
	4a) Of the above claim(s) is/are withdrawn from consideration.							
	5) Claim(s) is/are allowed.							
	6)⊠ Claim(s) <u>1-25</u> is/are rejected. 7)□ Claim(s) is/are objected to.							
8)	Claim(s) are subject to restri	ction and/or election	requirement.					
Applicati	on Papers							
9)[The specification is objected to by the	ne Examiner.						
10)⊠ The drawing(s) filed on <u>20 June 2001</u> is/are: a)⊠ accepted or b)□ objected to by the Examiner.								
	Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a). Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).							
11)[11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.							
Priority (ınder 35 U.S.C. § 119		·					
_	Acknowledgment is made of a claim	for foreign priority u	undor 25 II C.C. 5 1	10(a) (d) a= (f)				
	☐ All b)☐ Some * c)☐ None of:	rior loreign priority u	ilidei 33 U.S.C. 9 1	19(a)-(d) or (1).				
ω _{ji}	1. Certified copies of the priority documents have been received.							
	2. Certified copies of the priority			lication No				
	3. Copies of the certified copies				Stage			
	application from the Internation			scived in this reational	Olage			
* 5	See the attached detailed Office action		. ,,	teived				
Attachmen	tie)							
	e of References Cited (PTO-892)		4) Interview Sum	man/ (PTO 412)				
2) Notic	e of Draftsperson's Patent Drawing Review (Paper No(s)/M	lail Date				
3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date 5) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) 6) Other:)-152)			
Paper No(s)/Mail Date 6)								

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DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.
- 2. Claims 1, 7, 18 and 24 are rejected under 35 U.S.C. 102(e) as being anticipated by Neogi (US 6,483,851)

Neogi discloses a system for network transcoding of multimedia data flow comprising the same method for transmitting data streams to a client, comprising. receiving input data from said client, said input data indicative of a desired bit rate for delivery of a data stream (col. 2, ln. 16-46: bit rate = line 36); analyzing the data stream to determine at least one characteristic of the stream (col. 2, ln. 26-46); transcoding the data stream, based on said at least one characteristic and said desired bit rate, to provide a transcoded data stream having a bit rate substantially equal to the desired bit rate; and transmitting the transcoded data stream to the client (col. 2, ln. 47-53) as specified in claims 1, 7, 18 and 24.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

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(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

4. Claims 3-4 and 20-21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Neogi.

With regard to claims 3-4 and 20-21: As applied to claims 1 and 18 above, it is well known to one of ordinary skilled in the art at the time the invention was made that if the available bandwidth is insufficient to allow transmission of the data stream at said desired bit rate, an adjusted lower bit rate must be used to transcode image signal and therefore, it would have been obvious to one of ordinary skilled in the art at the time the invention was made to modify the system of Neogi by adjusting the delivery bit rate to meet bandwidth requirement. Doing so would help to prevent overflow problem.

5. Claims 2 and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Neogi, in view of Wang et al (US 6,441,754).

As applied to claims 1 and 18 above, it is noted that Neogi does not particularly disclose that the input data comprises a desired delivery cost specified by said client, said method further comprising determining said desired bit rate from said desired delivery cost as specified in claims 2 and 19. Wang et al teaches the relationship between bit rate and cost of delivery. And therefore, it would have been obvious to one of ordinary skilled in the art at the time the invention was made to modify the system of Neogi by deriving a bandwidth requirement based on the delivery cost as taught by Wang et al. Doing so would help to provide services as to fit end users' demand.

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6. Claims 13-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Neogi, in view of Wang et al (US 6,441,754) and further in view of Sciammarella (US 6,281,940).

As applied to claim 2 above, it is noted that the combination of Neogi and Wang et al does not particularly disclose that the data stream further comprises an audio data stream and the system further comprises: a demultiplexer for receiving the data stream and separating the stream into the audio data stream and the video data stream; and an audio transcoder unit for receiving the audio data stream and encoding the audio data stream to reduce its bit-rate, wherein the audio data stream provides audio content for the MPEG video data stream; comprising a multiplexer that combines the encode audio data stream and the modified MPEG video data stream into a single data stream; further comprising a streamer that transmits the single data stream to a client; further including all output buffer to hold at least a portion of the single data stream prior to transmission to the client device; wherein the rate control unit determines an output data rate of the output buffer to determine an available bandwidth of a network used to transmit the single data stream as specified in claims 13-17. Sciammarella teaches how to decode (by using a demultiplexer) a typical MPEG encoded packetized data stream (put together by a multiplexer) that comprises an audio data stream and a video data stream (col. 3, In. 53 - col. 4, In. 7). Therefore, it would have been obvious to one of ordinary skilled in the art at the time the invention was made to modify the system of Neogi and Wang et al by implementing a demultiplexer to decode an encoded packetized data stream into an audio data stream and a video data stream and

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reencode these streams using different bit rate. Doing so would help to meet the users' bandwidth requirement.

7. Claims 5-6, 8-12, 22-23 and 25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Neogi, in view of Anantharamu et al (US 2002/0136298).

As applied to claims 1 and 7 above, it is noted that Neogi further discloses the rate control unit further determines an available bandwidth of a network used to transmit said data stream (col. 2, In. 16-46) as specified in claim 10; However, Neogi does not particularly disclose that the data stream comprises a predictive coded video data stream and said step of transcoding comprises: analyzing said predictive coded video data stream to determine at least one characteristic of the video data stream; identifying at least one frame of the video data stream that can be replaced with a corresponding replicating frame, said replicating fame being substantially identical to a previously decoded frame; and replacing the at least one frame with its corresponding replicating frame as specified in claims 5, 8, 22 and 25 and wherein: said step of analyzing said predictive coded video data stream comprises categorizing a plurality of frames of said predictive coded video data into a plurality of fame types; and said step of identifying at least one frame of the video data stream comprises ranking said plurality of fames in accordance with their game type; and said step of replacing the at least one frame comprises first replacing those frames ranked as less important than other frames, prior to replacing said other frames as specified in claims 6, 9, 11 and 23. Anantharamu et al. teaches a system to transcode predictive coded video data is provided. The system includes a client that receives a modified stream of video data, a content analysis and

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description system that analyzes the stream of video data to determine characteristics of the stream, a <u>frame ranker</u> subsystem that assigns a numerical rank to each frame included in the stream of video data, a rate control subsystem that determines an available bandwidth of a network and of the client for transmitting the stream of video data to the client, and a transcoder subsystem that modifies the stream of video data to accord with the available bandwidth by replacing a frame with a previously <u>encoded</u> <u>frame which replicates</u> a previous decoded frame according to a <u>frame rank (Para. 10)</u>. Therefore, it would have been obvious to one of ordinary skilled in the art at the time the invention was made to modify the system of Neogi by modifies the stream of video data to accord with the available bandwidth by replacing a frame with a previously <u>encoded</u> <u>frame which replicates</u>.

With regard to claim 12: As applied to claim 9 which was rejected by the combination of Neogi and Anantharamu et al. It is noted that Neogi further disclose MPEG stream (col. 2, ln. 56-61), it is noted that the combination does not particularly disclose transcoder unit provides a modified MPEG video data stream having a bit rate substantially equal to said desired bit rate as specified in claim 12. It is well known to one of ordinary skilled in the art at the time the invention was made that if the available bandwidth is insufficient to allow transmission of the data stream at the desired bit rate, an adjusted lower bit rate must be used to transcode image signal and therefore, it would have been obvious to one of ordinary skilled in the art at the time the invention was made to modify the system of Neogi by adjusting the delivery bit rate to meet bandwidth requirement. Doing so would help to prevent overflow problem.

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Conclusion

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

- a. Assuncao (US 6,226,328) discloses a transcoding apparatus for digital video networking.
- b. Lai et al (US 6,407,680) discloses a distributed on-demand media transcoding system and method.
- c. Lu et al (2002/0080877) discloses a method and system for video transcoding.
 - d. Linzer et al (US 6,141,447) discloses a compressed video transcoder.
- 9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Nhon T Diep whose telephone number is 703-305-4648. The examiner can normally be reached on m-f.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chris S Kelley can be reached on 703 305-4856. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

ND

9 Dec 2004

NHON DIEP PRIMARY EXAMINER